1120 Connecticut Avenue NW, Suite 400
Washington, D.C. 20036
(202) 776-1550
(202) 776-1555 Fax

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July 21, 1998

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

ORIGINAL

Ex Parte

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Section 706 Petitions (CC Docket No. 98-11; CC Docket No. 98-26; CC Docket No. 98-32; CC Docket No. 98-78; CC Docket No. 98-91; CCB/CPD 98-15)

Dear Ms. Salas:

This letter is submitted ex parte on behalf of WorldCom, Inc. ("WorldCom") in the above-cited proceedings. One of the arguments raised by the Regional Bell Operating Companies ("RBOCs") and their supporters in their petitions and comments in these proceedings is that the RBOCs currently have no incentives to invest in, and deploy, advanced telecommunications capability and services, such as Digital Subscriber Line ("DSL") service. The RBOCs maintain that radical deregulation of their provision of DSL capability and services is essential in order to provide such incentives.

In its comments in these proceedings, WorldCom has repeated the increasingly obvious point that the RBOCs' "lack of incentives" argument is pure fiction. For example, WorldCom pointed out in one Section 706 pleading that nothing prevents the RBOCs today from rolling out ADSL and other advanced services.[1] In fact, the RBOCs themselves have offered the Commission all the proof that is needed. As WorldCom explained in opposition to SBC's Section 706 petition:

> the facts give the lie to SBC' contentions. Not a week goes by that another ILEC does not announce new or expanded plans to provide ADSL services.... Of course, the point is that the ILECs already are busily deploying ADSL services across the country, even under the current regulatory regime. Current deployment incentives obviously are more than sufficient. SBC fails to

[1] Consolidated Opposition of WorldCom, Inc., CC Docket Nos. 98-11, 98-26, 98-32, filed April 6, 1998, at 37.

pinpoint how the ILECs' ambitious deployment plans are being adversely affected by the 1996 Act.[2]

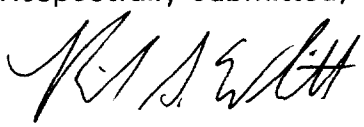
Even since WorldCom filed the last of its pleadings in late June, the RBOCs continue to make further public announcements about their planned accelerated deployment of ADSL services. These announcements include optimistic assessments -- by the RBOCs themselves -- about the near-term availability of ADSL to residential consumers, and expected high levels of consumer usage of these services:

- Ameritech asserts that its new ADSL-based Internet access service will be available to 70 percent of its customers within the next three years;
- Bell Atlantic expects ADSL service to be the leading high-speed network access service in its consumer market by the end of 1999;
- Pacific Bell intends to offer ADSL in mid-summer 1998 to over 4.4 million residential households and 650,000 business customers;
- US WEST plans to offer its MegaBit ADSL service to 5.5 million customer lines by the end of July 1998.

In order to ensure that the records in these proceedings demonstrate conclusively that the RBOCs' "lack of incentives" argument is nothing but a sham, WorldCom hereby appends to this letter copies of the RBOCs' own website announcements of their current and planned deployment of ADSL across the country.

An original and two copies of this letter are hereby submitted to your office today, pursuant to the requirements of Section 1.1206(b)(1) of the Commission's rules, for each of the above-referenced proceedings. Please contact the undersigned if you have any questions.

Respectfully submitted,



Richard S. Whitt
Director, Federal Affairs

cc: Chairman Kennard
Commissioners Furchgott-Roth, Ness, Powell, Tristani
Kathy Brown, Chief, Common Carrier Bureau

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[2] Opposition of WorldCom, Inc., CC Docket No. 98-91, filed June 24, 1998, at 11-12.

AMERITECH

AMERITECH RELEASE: December 9, 1997

For further information, contact:
Geoff Potter, Ameritech, 312-526-8223 or geoff.potter@ameritech.com
Jean Medina, Ameritech, 312-364-2134 or jean.w.medina@ameritech.com
Francine Plaza, PLAZApr for Microsoft, 561-477-9762 or plaza_pr@gate.net
Sue Barnes, Waggener Edstrom for Microsoft, 408-986-1140 or sueb@wagged.com

Ameritech Launches High Speed Internet Service

Company Partners with Microsoft to Make ADSL Internet Access Easy to Install

CHICAGO -- In a series of moves that will dramatically expand use of the Internet for its consumer and small business customers, Ameritech today announced it is launching high-speed Internet access and is partnering with Microsoft to make the ADSL-enabled service easier to install and simpler to get.

Ameritech this week is launching Ameritech.net (SM) High-Speed Internet Service, which the company plans to make available to 7 out of 10 Ameritech customers in the next three years. The company is deploying the service initially in Ann Arbor, Mich., to be followed by Royal Oak, Mich., and then the Chicago area in mid 1998.

50 Times Faster

Ameritech.net High Speed Internet Service uses Asymmetric Digital Subscriber Line (ADSL) technology to enable customers to connect to the Internet at speeds up to 50 times faster than a standard telephone line and modem. ADSL is a modem technology that enhances the existing copper telephone wiring serving virtually all homes and businesses.

Ameritech.net High-Speed Internet Service will be $59.95 per month, which includes an ADSL line and unlimited Internet access, plus a one-time $150 installation charge. Through 1998, Ameritech is offering charter memberships at $49.95 per month and is waiving the $199 cost of the modem. The service will enable users to download materials from the Internet at speeds of up to 1.5 megabits per second and send materials at speeds up to 128 kilobits per second.

"By connecting to the Internet with ADSL, users will see dramatic speed improvements -- a graphic-intensive web page that would take a minute to download with a standard modem will only take a second with ADSL," said Thomas Richards, Ameritech executive vice president, communication and information products sector.

For example, using ADSL, a customer could download the entire Encyclopedia Britannica in 31 minutes. Using a standard 28.8 modem, downloading the same information would take 27 hours.

"Plug and Play ADSL"

As part of its ongoing effort to bring ADSL-enabled Internet access to customers, Ameritech also announced it is partnering with Microsoft to make the technology easier to install and simpler to use. As part of the two companies' relationship:

- Ameritech and Microsoft are working with hardware manufacturers to make their PCs and equipment ADSL compatible, which will make it even easier for customers to enjoy the benefits of ADSL-enabled Internet access service;
- Ameritech will package Ameritech.net High Speed Internet Service offerings with Microsoft Internet Explorer for using the World Wide Web, e-mail and user groups; and
- Ameritech will package Ameritech.net High Speed Internet Service offerings with software that greatly simplifies the installation of ADSL, ensuring that a user's MS Windows operating system is ready to connect to the Internet using ADSL.

"We are working collaboratively to make installing ADSL as easy as plug and play," said Cameron Myhrvold, vice president of Microsoft's Internet customer unit. "This technology will make it easy for consumers and businesses to seamlessly enjoy the benefits of high-speed Internet access without any problems or needs for additional installation visits. Microsoft supports ADSL and is pleased to be working with Ameritech to make this service available to its customers."

"Customers are tired of having to wait to download text, graphics and video from the Internet. Ameritech.net High Speed Internet Service will improve the Internet experience for customers by making super high-speed access easy," said Valeri Marks, president of Ameritech Interactive Media Services. "Many of our customers, especially those who work from home or have families who use the Internet extensively, told us that easy-to-use, high-speed Internet access is important to them. We are working to meet that need."

Founded in 1975, Microsoft (NASDAQ "MSFT") is the worldwide leader in software for personal

computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day.

Ameritech (NYSE: AIT) serves millions of customers in 50 states and 40 countries. Ameritech provides a full range of communications services, including local and long distance telephone, cellular, paging, security monitoring, cable TV, electronic commerce, on-line services and more. One of the world's 100 largest companies, Ameritech (www.ameritech.com) has 69,000 employees, 1 million shareowners and $24 billion in assets.

Fact Sheet

Ameritech.netSM High Speed Internet Service

Ameritech.net High Speed Internet Service is based on Asymmetric Digital Subscriber Line (ADSL) technology, which enables users to connect to the Internet at speeds up to 50 times greater than with a regular phone line and a standard 28.8 modem. Other benefits of ADSL-enabled Internet access include an always-on capability that means users won't have to log on. ADSL is ideal for multimedia and data communications, such as Internet access because it reduces to seconds the amount of time necessary to download complex graphics and information that used to take several minutes.

Customer Computer Requirements

To use Ameritech.net High-Speed Internet Services, customers need to have an IBM-compatible personal computer with Pentium processor, the Windows 95 operating system, 16 MB random access memory, CD-ROM and 32 MB hard drive capacity. Ameritech.net is available with Microsoft Internet Explorer for using the World Wide Web, e-mail and newsgroups; personalized Web pages; CyberPatrol(parental control software; and chat software for joining online discussions.

Ameritech Network Upgrades

The service will be delivered over Ameritech's state-of-the-art asynchronous transfer mode (ATM) backbone. Ameritech will use standards-based ADSL equipment from Alcatel Telecom Inc. Ameritech was one of four major communications companies that formed a buying consortium last year and reviewed ADSL equipment solutions from numerous vendors before choosing the Alcatel 1000 for its deployment.

Expanded Ameritech.net Availability

The introduction of ADSL-based Internet access follows the company's successful trial of the service in Wheaton, Ill. and the targeted launch of Ameritech.net, which is currently available to 3 out of 4 Ameritech customers.

The enhanced Internet access service complements the expansion announced last week of Ameritech.net, the company's easy-to-use, affordable Internet service, into five additional cities. Ameritech.net is now available in Milwaukee, Columbus, Indianapolis, Grand Rapids and Kalamazoo, Mich. metropolitan areas in addition to Chicago, Detroit and Cleveland. Prices remain at $19.95 a month for unlimited Internet and $8.95 for 10 hours of Internet each month.

Since the launch of Ameritech.net about a year ago, the company has enhanced and expanded features based on response from customers in Chicago, Detroit and Cleveland. Based on its initial success, the service will be expanded farther.

How to Order

To order Ameritech.net, customers can call 800-NET-8775. Ann Arbor residents wishing to order Ameritech.net High Speed Internet Service should call 800-910-4369.

PHOTO EDITORS: A screen shot of Ameritech.net's start page is available for downloading.

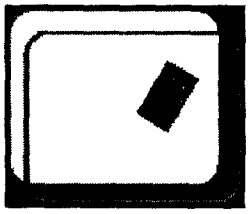
Ameritech

Products & Services

Solutions For You

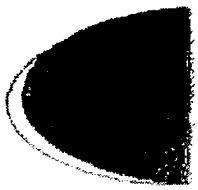
Special Offers

PICK A PRODUCT



ISDN and ADSL

Products and Services



ISDN

ISDN (Integrated Services Digital Network) is a technology capable of transmitting data at speeds up to 128K. Now you can access the Internet at speeds up to 4 times as fast as a 28.8K modem. Or increase home office productivity by using your phone, fax, and computer at the same time. Best of all, you can do it all for just the fraction more than the cost of a second line.

For complete information, please visit the ISDN for Home section of our site.

ADSL

Asymmetrical Digital Subscriber Line (ADSL) is a new technology that allows information to be transmitted on a telephone line at very high speeds.

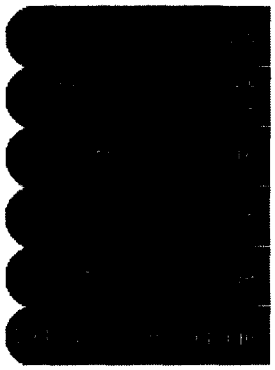
Ameritech.net High Speed Internet Service provides a complete package for using the Internet at very high speeds. The package includes an Internet access account with up to 5 email addresses and member IDs, customized browser software for your PC, a special modem, network interface card, and a high-speed ADSL line for connecting to the Internet. Our High Speed Service can be up to 50 times faster than a standard 28.8K modem.

The High Speed Internet Service is currently available only in Ann Arbor and Royal Oak Michigan, but Ameritech.net is working hard to hook up as many customers as possible. By the end of the century, 70% of the homes in the Great Lakes region will have access to the service.

For more information call 1-800-910-4369.

BELL ATLANTIC

Bell Atlantic To Offer ADSL-Based Service Starting in Mid-1998



Company Selects DSC to Provide ADSL Equipment, Software

May 19, 1997

Media contacts: Bell Atlantic
Joan Rasmussen
703-974-8815
joan.m.rasmussen@bell-atl.com

ARLINGTON, Va. - Bell Atlantic Network Services, Inc., today announced that it has chosen DSC Communications to supply equipment and software for the company's 1998 launch of a high-speed data communications service for consumers using a technology called Asymmetric Digital Subscriber Line (ADSL).

Bell Atlantic has already deployed DSC's Litespan*-2000 digital loop carrier system in its network. Now, DSC will integrate ADSL technology with this system to deliver more advanced services to Bell Atlantic customers.

"Today's Internet applications are becoming rich in multimedia content such as video and audio," said Fred D'Alessio, president-Bell Atlantic Consumer Services. "Consumers are hungry for faster and faster speeds to take advantage of this content and for telecommuting or remote access to corporate computer networks. ADSL puts consumers in the seat of a Ferrari, roaring past analog modem users still in the bicycle lane.

"Our agreement with DSC furthers Bell Atlantic's commitment to serve the needs of consumers for connectivity with a full palette of high-speed consumer data services, including our popular and universally available ISDN (Integrated Services Digital Network) service. With the deployment of advanced technology platforms such as ADSL, we'll be offering an increasing array of high-bandwidth services," he said.

Under a four-year contract with Bell Atlantic, DSC is working with Westell Technologies to make the Litespan 2000 ADSL-capable. In addition, DSC will provide Bell Atlantic with Westell's ADSL modems that will connect with customers' computers in offices and homes. DSC also will provide additional ADSL software and equipment.

The agreement calls for DSC to provide Bell Atlantic with the technology to overcome existing distance limitations of ADSL technology. Today, most loops longer than about three miles are served via digital loop carrier systems, and until now, ADSL could not work directly over these systems. DSC's system integrates ADSL into its Litespan Digital Loop Carrier system, eliminating the distance limitation.

"ADSL technology will be instrumental in providing more customers with advanced data services," said Mike Pisterzi, vice president, DSC's North American telco sales. "We are pleased that Bell Atlantic has chosen to upgrade our flexible Litespan systems to support ATM-based ADSL. Litespan is a highly reliable, affordable and efficient access platform that allows a smooth evolution from narrowband to broadband applications, including ADSL."

Bell Atlantic plans to begin offering an ADSL-based data service for consumers in mid-1998, followed shortly thereafter by a business offering. The company is evaluating pricing and deployment locations. By the end of the decade, Bell Atlantic expects ADSL service to be the leading high-speed, network access service in the consumer market.

With ADSL, consumers have high-speed data communications capability over regular telephone lines. And, unlike cable modems, ADSL provides dedicated bandwidth and secure communications.

The service will allow users to receive data from the Internet, or to connect to their office's local area network, at speeds up to 6 megabits per second (Mbps). That's 100 times faster than today's fastest analog telephone modem, which receives data at a rate of 56 kilobits per second (Kbps).

Bell Atlantic currently is conducting a market trial of ADSL-based Internet access in northern Virginia with about 250 consumers to test their use of and reaction to ADSL technology. The trial, which began last September, is expected to continue through June.

"Participants in the trial are thrilled with the speed and value this service adds to their online experience as well as the quality of Bell Atlantic's ADSL data service," said D'Alessio. "The market trial is giving us a lot of very useful information that's helping us formulate our rollout strategy."

Deployment of ADSL technology by Bell Atlantic and other local exchange companies has the potential to alleviate some of the pressure that the tremendous increase in Internet usage is placing on the public switched telephone network. ADSL technology allows the data traffic that flows to and from a user's PC to be connected directly to a packet switch or router, and sent over an efficient high-speed packet data network, thus keeping such traffic from congesting the public switched network, which is engineered for voice telephone calls.

Industry analysts predict that 20 percent of consumers will have high-speed data connections within the next five years. With 11.5 million households in its mid-Atlantic service area, Bell Atlantic believes ADSL-based data service will play a significant role with that fast-growing market.

"Our ISDN customers will find it easy and affordable to upgrade to ADSL," said D'Alessio. "And our customers who use analog modems today for Internet access and connectivity also will find it easy to upgrade to higher bandwidth services. It's a tremendous market opportunity and we expect to be the market leader with a number of high-speed digital solutions."

Bell Atlantic is the country's premier provider of ISDN technology, serving 206,000 customers at business and home. ISDN, which is available throughout Bell Atlantic's mid-Atlantic service area, allows users to transmit and receive data at speeds up to 128 Kbps over existing phone lines. Currently, consumers are signing up for Bell Atlantic's ISDN service at a record pace.

"ADSL will complement our ISDN offering," said D'Alessio. "With the wide availability of ISDN, and the promise of ADSL's blazing speed, consumers will be able to burn up the information superhighway."

DSC Communications Corp. is a global provider of advanced telecommunications products, including digital switching, transmission, access and network management systems. DSC's integrated network solutions support voice, data and video services, such as intelligent networking, wireless, Internet and switched digital video applications. DSC has annual revenues of approximately $1.4 billion and is active in more than 60 countries worldwide.

Bell Atlantic Corp. (NYSE: BEL) is at the forefront of the new communications, entertainment and information industry. In the mid-Atlantic region, Bell Atlantic's telephone company subsidiaries are the premier providers of local telecommunications and advanced services. Globally, it is one of the largest investors in the high-growth wireless communication marketplace. Bell Atlantic also owns a substantial interest in Telecom Corporation of New Zealand and is actively developing high-growth national and international business opportunities in all phases of the industry.

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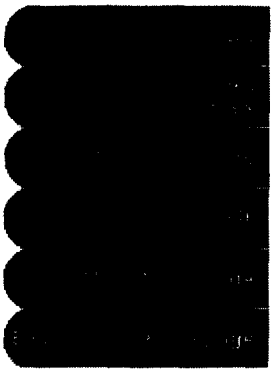
* Litespan is a registered trademark of DSC Communications Corp.



Carnegie Mellon, Bell Atlantic To Raise Speed Limit on Information Superhighway

University Participates in Data Connectivity Trial Using ADSL Technology

July 24, 1997

Media contacts:

Bell Atlantic:
Shirley Risoldi (412-633-5574)
shirley.a.risoldi@bell-atl.com
Tim Ireland (973-649-2279)
timothy.ireland@bell-atl.com

Carnegie-Mellon University:
Don Hale (412-268-2900)
dh0c@andrew.cmu.edu

Westell Technologies:
Mark L. Meudt (630-375-4125)
meudt@westell.com

ODS Networks, Inc.:
Terri Griffin (972-664-8040)
tgriffin.ods.com

PITTSBURGH - A group of 100 students, faculty and staff at Carnegie Mellon University are going to help Bell Atlantic test the speed limit on the Information Superhighway.

During the next 10 months, the group will be trying out Asymmetric Digital Subscriber Line [ADSL], Bell Atlantic's advanced, high-speed data communications service.

Participants in the trial, which begins this summer following a filing with the state commission, will be able to hook up to Carnegie Mellon's on-campus local area network [LAN] from home at speeds as fast as 1.5 million bits per second [Mbps.]. That's more than 25 times faster than today's fastest analog modems, which receive data at a maximum speed of 56,000 bits per second.

"With this new trial of ADSL technology, we'll begin to extend the high-speed network service for at-home use by our faculty, students and staff," said Alex Hills, Carnegie Mellon's vice provost for computing services. "They'll become our first true 'cybercommuters,' able to perform from their own homes the same computer-intensive activities they now do in the office."

Demonstrations of ADSL technology will be conducted for trial participants during a "town meeting" today on the Carnegie Mellon campus. The meeting, which is designed to acquaint participants with ADSL, will include explanations of how it works and details about the trial. Participants also will be able to try out the technology.

Bell Atlantic will use the 10-month technical trial to analyze ADSL's ability to provide high-speed remote LAN access to large corporate or institutional customers. In addition, the trial will allow participants to experiment with and develop applications that take advantage of having bandwidth of 1.5 Mbps. to the home.

"We're excited about exploring the potential of ADSL at a university such as Carnegie Mellon, where students, faculty members and other users are likely to employ the technology in creative ways," said Karl Rookstool, director-internetworking at Bell Atlantic Network Services.

"Perhaps medical students will be able to study huge MRI files in groups from remote locations, or maybe language scholars, from the comfort of their own homes, will be able to pore over photographs of manuscripts too ancient and fragile to touch," Rookstool said. "We're hoping to see ADSL used to the limits of Carnegie Mellon's collective imagination."

Possible uses for ADSL technology on campus include

- **Distance Learning** - Interactive audio and full-motion video transmissions between classrooms that will allow students, teachers and administrators to interact

from separate locations.

- **Remote Access** - A professor at home or a student in a dorm room will be able to access large files and applications that are located on a computer in a library or laboratory.

- **Telemedicine** - Two medical specialists, perhaps miles apart, can consult over the same MRI image and make diagnoses.

- **Electronic Library** - Even after the library closes, midnight oil burners often need access to reference materials. ADSL gives students remote high-speed access to on-line books, journals and catalogs.

- **Games** - You know what they say about all work and no play. Students and faculty members can use the ADSL network to access computer games from remote locations. The games can be used by single or multiple players competing against each other from separate dorm rooms.

ADSL allows the data traffic that flows to and from a user's PC to be connected directly to a packet switch or router. Data then flows over an efficient high-speed data packet network, rather than over the public switched network, which is engineered specifically to handle voice telephone calls.

So in addition to providing customers with the ability to transmit data at lightning speeds, ADSL also helps keep the public voice network from becoming congested with ever increasing data traffic.

During the trial, Westell Technologies will provide the ADSL terminal equipment (or modems) that will connect with the PCs of trial participants. ODS Networks, Inc. will provide the ethernet connections between Carnegie Mellon, Bell Atlantic's central office and the homes of trial participants.

Bell Atlantic will install and maintain ADSL equipment in Carnegie Mellon's telecommunications network and at the homes of trial participants. The company and Carnegie Mellon also will design and monitor tests that participants will conduct during the trial to put stress on the ADSL network.

Bell Atlantic Brings Extensive ADSL Experience to Table

Bell Atlantic is a pioneer in working with ADSL. In the early 1990s, the company conducted trials of an ADSL-based service that enabled consumers to order digitized movies, classic television shows and sports events on demand.

Bell Atlantic currently is conducting a market trial of ADSL-based Internet access in northern Virginia with about 250 consumers to test their use of and reaction to ADSL technology. The trial, which began last September, is expected to continue through the end of this year. In the trial, Bell Atlantic is using ADSL "modems" from Westell Technologies that are similar to the gear being used in the Carnegie Mellon trial.

Bell Atlantic plans to begin offering a high-speed data communications service using ADSL technology for consumers in mid-1998, followed shortly thereafter by a business offering. That service will offer speeds up to 6 Mbps. The company is evaluating pricing and deployment locations.

Bell Atlantic Corp. (NYSE: BEL) is at the forefront of the new communications, entertainment and information industry. In the mid-Atlantic region, the company's telephone company subsidiaries are the premier providers of local telecommunications and advanced services. Globally, it is one of the largest investors in the high-growth wireless communication marketplace. Bell Atlantic also owns a substantial interest in Telecom Corporation of New Zealand and is actively developing high-growth national and international business opportunities in all phases of the industry.

ADSL/BROADBAND

ADSL technology has the potential to deliver efficiently the high-speed, competitively-priced data services that consumers have requested for Internet access, video, telecommuting and other network services.

Background

Asymmetrical Digital Subscriber Line (ADSL) is a super-fast data communications technology that converts existing twisted-pair copper telephone lines into access paths for multimedia and high-speed data communications. ADSL technology can help alleviate some of the pressure that the tremendous increase in Internet usage is placing on the public switched network. By allowing the data traffic that flows to and from a user's personal computer to be connected directly to a packet switch or router and sent over an efficient high-speed packet data network, ADSL prevents such traffic from congesting the public switched network. With ADSL, customers can have high-speed data communications capability over regular telephone lines. And, unlike cable modems, ADSL provides dedicated bandwidth, widespread coverage, and secure communications.

Key Issues

There are a number of issues, primarily related to deployment of the service and unbundling of its component parts that will affect ADSL's future. Among them are:

- *Technical Considerations*: ADSL technology can be used to deliver services to customers whose copper loops are within 12 kilofeet (about 2.3 miles) of a central office, or are served by up-to-date digital loop carrier (DLC) systems. There will be cases where some customers may be "loop qualified" for ADSL, while others served by the same central office are not because they more than 12 kilofeet from the central office. Thus, while high-speed data services eventually will reach most of Bell Atlantic's customer base, there may be technological challenges to deploying ADSL services in some areas.

- *Market Considerations*: Market penetration by personal computers and location relative to ADSL-capable central offices will play a key role in determining Bell Atlantic's ADSL deployment plans. As a result, the service may not be deployed in areas where distance limitations and PC market concentrations make it infeasible.

- *Competitive Resale of Service*: Physical unbundling, as required by the FCC Local Competition Order and the 1996 Telecommunications Act, could lead to inefficient use of existing communications facilities. The requirement that the underlying network components be made available to competitors in order to permit them to offer service based on these elements in any manner they desire could permit competitors to offer the data channel separate and apart from the voice channel. This would require additional facilities to offer traditional voice service, ultimately causing an increase in overall costs to end-user customers regardless of whether they are served by Bell Atlantic or a competitive local exchange carrier

Bell Atlantic Position

ADSL is a very useful technology that can provide broadband services to many customers in the very near future. With appropriate regulatory flexibility, ADSL will allow Bell Atlantic to satisfy the growing demand for bandwidth while continuing to build a fiber-to-the-curb, switched broadband network, which will provide higher speed services to more customers. Bell Atlantic is working towards deploying high-speed network services throughout the region.

In those areas where ADSL service may not be deployed because of distance limitations and PC market concentrations, ISDN (Integrated Services Digital Network) will continue to be widely available throughout the region and will continue to be a competitive high-speed data solution in most areas where ADSL is not available. For example, Bell Atlantic's ISDN Anywhere offering makes the service available to all customers throughout the southern part of the region. In the northern area, 90% of our customers can order ISDN today.

Position of Other Key Stakeholders

BellSouth is currently conducting a technical trial in Atlanta, Georgia, of both Internet and intranet access using ADSL technology and a market trial in Birmingham, Alabama, of Internet access and possible telecommuting.

U S West is currently conducting a technical trial of ADSL Internet access and telecommuting in Boulder, Colorado.

GTE is conducting a technical trial of ADSL Internet and remote local area network (LAN) access in Irving, Texas; Redmond, Washington; Durham, North Carolina; and West Fayette, Indiana.

Pacific Bell is conducting an ADSL technical trial of Internet access, telecommuting, and remote LAN access in San Ramon, California; Danville, California; and Palo Alto, California.

Ameritech is conducting a trial of ADSL Internet access and telecommuting in Wheaton, Illinois.

SBC is conducting a technical trial in Houston, Texas of ADSL Internet and remote LAN access.

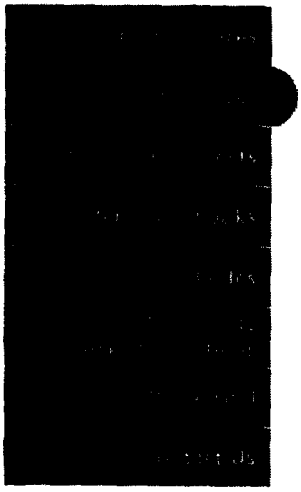
Status

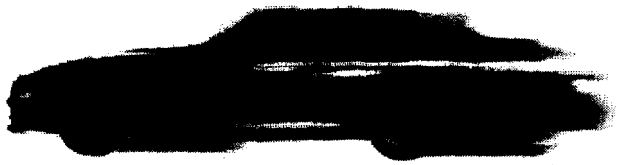
Bell Atlantic is currently engaged in the following trials of ADSL technology:

- Boston, Massachusetts: Technical trial with 60 employees of Lotus/IBM who are using 1.5 Mbps/64 Kbps ADSL in their homes for remote access to their office LAN.
- Northern Virginia: Market trial of 1.5 Mbps/64 Kbps ADSL service with 250 customers
- Pittsburgh, Pennsylvania: Technical trial of 1.5 Mbps/64 Kbps ADSL service with students from Carnegie Mellon University.

Bell Atlantic recently announced it would begin a commercial offering of ADSL service to consumers in mid-1998, followed shortly with an offering to business customers.

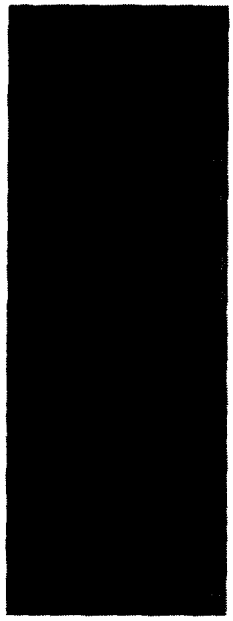
Residential Services





Too fast to picture? Imagine traveling at 675 miles per hour in a convertible... That's Bell Atlantic InfoSpeed Service - powered by ADSL technology.

Plus, it's always connected... it's on your regular phone line... and you can place phone or fax calls at the same time you're on the Internet.



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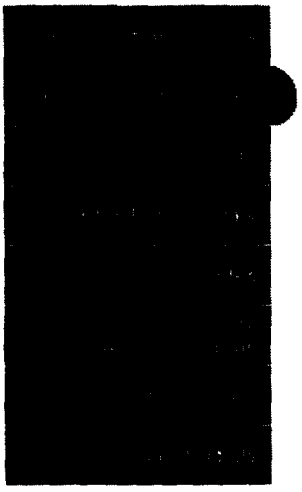


What is InfoSpeed?

The fastest, dedicated link for your home.

Bell Atlantic InfoSpeed is our latest high-speed data offering. It is based on Asymmetric Digital Subscriber Line (ADSL), a new super-fast digital modem technology from Bell Atlantic that provides data transmission at significantly higher speeds using your PC.

InfoSpeed service expands the power of your existing plain old telephone service (POTS)...providing the fastest, dedicated residential link to the Internet and remote local area networks (LANs).

Even better, InfoSpeed allows a single phone line to operate as a true multi-tasking tool, so you can use your telephone or fax machine while using your ADSL modem for a data call.

Bell Atlantic InfoSpeed can best be described as follows:

- A very fast connection: 7.1 Mbps downstream (to your home), and up to 680 Kbps upstream (from your home).
- Dedicated bandwidth to your Internet Service Provider (ISP).
- Always on - *no need to dial up and no busy signals.*
- A service that works on your regular phone line, without disrupting your voice communication (i.e., you can use your phone at the same time you are using InfoSpeed to surf the web).
- Dedicated access, which is more secure than a shared access arrangement like that used by cable modem companies.

How It Works

Bell Atlantic InfoSpeed service employs Asymmetric Digital Subscriber Line (ADSL), a modem technology that places digital bits in the inaudible frequency of your standard telephone line. The line is split at your home, carrying voice to your telephone or fax machine and data to your computer via an ADSL Terminal Unit-Remote (ATU-R). An installed Network Interface Card (NIC) is required in your computer to interface with the ATU-R. These two devices are connected with an Ethernet cable.

As the name implies, ADSL is an asymmetric technology. It provides higher bandwidth speeds where you need it most - from the Internet (or office) to your home. Smaller bandwidth is provided upstream (from your home). ADSL technology is distance sensitive - so you must reside within a specific distance from your Bell Atlantic Central Office to get it. It is the upstream bandwidth that limits the distance.

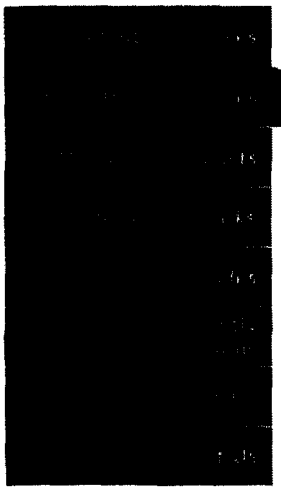
Bell Atlantic InfoSpeed Services

Bell Atlantic will be offering three services, starting September, 1998:

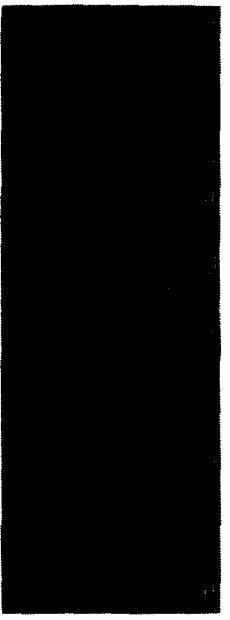
- InfoSpeed 640K, which will provide downstream speeds up to 640 Kbps and upstream speeds up to 90 Kbps;
- InfoSpeed 1.6M, which will provide downstream speeds up to 1.6 Mbps and upstream speeds up to 90 Kbps; and
- InfoSpeed 7.1M, which will provide downstream speeds up to 7.1 Mbps and upstream speeds up to 680 Kbps.

Even more exciting, Bell Atlantic will be offering Internet packages starting as low as $69.95! The packages will be:

- ***Personal InfoSpeed***, which will include InfoSpeed 640 Kbps and Bell Atlantic.net;
- ***Professional InfoSpeed***, which will include InfoSpeed 1.6 Mbps and Bell Atlantic.net; and
- ***Power InfoSpeed***, which will include InfoSpeed 7.1 Mbps and Bell Atlantic.net



- **Pricing**
- **Locations**
- **ISDN Rewards Program**



Pricing

Monthly

Bell Atlantic plans to introduce InfoSpeed Services at the following rates:

	Monthly Rate
InfoSpeed 640 Kbps	$39.95
InfoSpeed 1.6 Mbps	$59.95
InfoSpeed 7.1 Mbps	$109.95

Pricing for Bell Atlantic Internet packages will be as follows:

	Monthly Rate
Personal InfoSpeed (InfoSpeed 640 Kbps & Bell Atlantic.net)	$69.95
Professional InfoSpeed (InfoSpeed 1.6 Mbps & Bell Atlantic.net)	$109.95
Power InfoSpeed (InfoSpeed 7.1 Mbps & Bell Atlantic.net)	$189.95

One-Time Charges

One-time charges include the following:	
Service Connection Charge:	$99.00
ADSL Modem:	$325.00
Turnkey Home Installation:	$99.00

For customers subscribing to one our Internet packages for twelve months, the ADSL modem is only $99 and the turnkey home installation is FREE!

Please note that if you do not already have a Network Interface Card (NIC), you will need to purchase one from Bell Atlantic or any other retail provider of NIC cards. Generally, the price for a NIC card is somewhere between $40 and $60.

Locations

Top

Bell Atlantic plans to service 2 million lines in 1998 and an additional 5 million lines in 1999. Deployment of the new suite of Bell Atlantic InfoSpeed services will begin in September in the Washington, D.C., Pittsburgh, and Philadelphia metropolitan areas. New Jersey's Hudson River waterfront will follow in October. The New York City and Boston metropolitan areas will begin to come on-line early in 1999. Additional markets will be announced in the future. Specific locations within each area in 1998 are expected to be:

- **Washington, D.C. Areas:**
  VA - Alexandria, Annandale, Arlington, Baileys Crossroads, Falls Church, Merrifield, Vienna (plus, current trial locations McClean, Tysons Corner, Fairfax, Springfield, and Burke);
  MD - Bethesda, Beltsville, Colesville, Hyattsville, Landover, Silver Spring, Suitland, Wheaton, and sections of Rockville.

D.C. - Dupont Circle, Georgetown, and other parts of Northwest, D.C.

- **Pittsburgh Areas:**
  Squirrel Hill, Glenshaw, Oakland, Beaver Falls, Bethel Park, Carnegie, Connellsville, Greensburg, New Castle, New Kensington, Uniontown, and Washington.

- **Philadelphia Areas:**
  Ardmore, Bala Cynwyd, Bryn Mawr, Bethayres and parts of Huntington Valley, Coatesville, Collegeville, Downingtown, Jenkintown, Perkasie, Phoenixville, Royersford, Souderton, Willow Grove, and the Oaklane and Chestnut Hill sections of Philadelphia.

- **New Jersey Areas:**
  North Bergen, Cliffside Park, Elizabeth, Englewood, Hackensack, Hoboken, Jersey City, Leonia, Oradell, Rutherford, Union City, and parts of Newark.

To qualify for InfoSpeed DSL service, your local Bell Atlantic Central Office must be outfitted with the DSL equipment and your phone line must be able to support the service. Your line will be tested for service compatibility once your Central Office is DSL equipped and you have placed your reservation for service.

Sign Up Today

If you reside in one of the above locations, reserve InfoSpeed DSL service today.

If your phone number does not qualify, you may check out our Residential ISDN service, which provides you with 128 Kbps in both directions. You may also be added to our mailing list to receive information when Bell Atlantic InfoSpeed Service comes to your area.

ISDN Rewards Program

Top

Bell Atlantic will be "technology-change proofing" its high speed services by introducing an "ISDN (Integrated Services Digital Network) Rewards" program concurrent with the launch of its InfoSpeed product line. Once Bell Atlantic InfoSpeed service is available in an area, Bell Atlantic residential customers who have purchased an ISDN modem from Bell Atlantic will be guaranteed an ADSL modem from the company at no additional charge when they subscribe to our Bell Atlantic.net DSL offering with a 12-month commitment. Bell Atlantic residential customers that prefer to use another Internet provider will receive 1/2-off Bell Atlantic's normal ADSL modem price, when they purchase an ADSL modem from Bell Atlantic. So, customers who want high-speed Internet access need not wait until ADSL-powered InfoSpeed is available in their area. Where Bell Atlantic InfoSpeed is not available or is not compatible with a person's line, customers can still order Bell Atlantic ISDN service for high-speed Internet access.

Bell Atlantic ISDN service is available - today - to nearly 20 million households in the mid-Atlantic region and the Northeast. ISDN can provide Internet connections that are more than four times faster than traditional 28.8 Kbps modems. Nearly half of the one million ISDN lines installed in the United States are used by Bell Atlantic customers.

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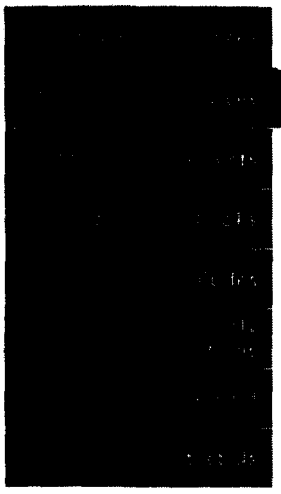
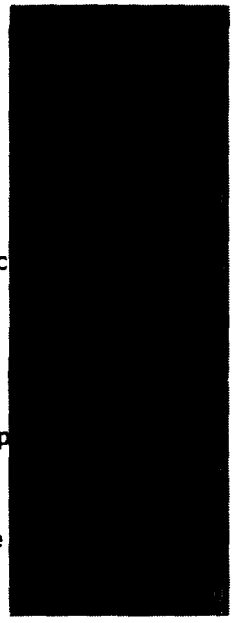


Using Bell Atlantic InfoSpeed

InfoSpeed is a cutting edge service that serves as a powerful resource tool.

With ADSL technology, Bell Atlantic is better able to meet your needs by applying a new high speed data access service, Bell Atlantic InfoSpeed, to your existing telephone lines. ADSL is called "asymmetric" because the downstream rate of data transmission is faster than the upstream rate. This characteristic makes ADSL technology the ideal vehicle for high-speed access to the Internet and other online services.

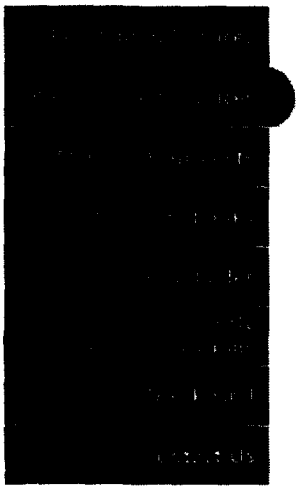


Internet / Online

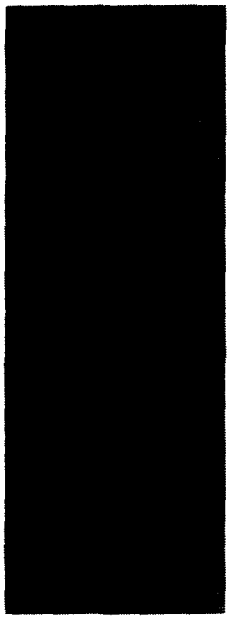
Bell Atlantic's InfoSpeed service sends data at rates ranging from 640 Kbps to 7.1 Mbps from the Internet to your home... up to hundreds of times faster than a conventional 28.8 Kbps modem... making Internet navigations more practical and reliable. The greatly increased speeds of InfoSpeed service turn your PC into a more powerful resource, allowing you to be more productive and to take advantage of substantial cost savings. Remember, when you're on the Internet... time is money!

Remote LAN Access / Telecommuting

The trend in telecommuting continues to grow; so does the demand for more efficient tools to help people who work from home keep current with activities taking place back at the office. With the bandwidth provided by InfoSpeed service, you can virtually telecommute to anywhere in the world; the disadvantages of distance are eliminated. For instance, InfoSpeed can cut the time required to transmit a typical Windows screen (50 KBps) from 21 seconds down to a fraction of a second. It will feel just like you're in the office - but without the headaches and commute.



- **Pricing**
- **Locations**
- **Order**



Trials

Bell Atlantic currently has an intrastate trial in place in Northern VA and technical trials in place in Pittsburgh, PA.

Pricing

Northern VA Trial
One-time charges are waived, including provisioning and service connection, inside wire, installation, ADSL modem, one NIC card, and ADSL equipment installation. There is a monthly recurring charge of $30, plus Internet Service charges from your Internet Services Provider (ISP). ISPs participating in this trial include:

Verio Mid-Atlantic	CAIS Internet	Bell Atlantic Internet Solutions
1-800-784-6512	1-703-448-4470	1-800-567-6789
$25.00 / month	$28.50 / month	$27.95 / month

Please be sure to confirm pricing with your ISP. You may also want to ask about the ISP's architecture for supporting ADSL bandwidth.

Pittsburgh, PA Trial
One-time charges are waived, including provisioning and service connection, inside wire, installation, ADSL modem, one NIC card, and ADSL equipment installation. No monthly recurring charge will be incurred for the InfoSpeed DSL service while the trial is being conducted. Internet service charges may apply.

Locations

Top
Northern VA Trial
Trial locations for Northern VA are Springfield, Fairfax, McLean/Tysons, Burke, and Annandale.

Phone numbers qualifying for the trial are in the 703 area code and have one of the following prefixes (first 3 numbers of your phone number):

218	270	321	425	503	712	821	902
219	273	323	426	506	714	827	903
239	275	352	440	556	734	847	905
246	277	356	442	569	748	848	912
249	278	359	448	591	749	866	913
250	279	383	451	610	760	873	917
259	285	385	455	613	761	874	918
261	286	394	452	644	764	883	923
267	287		457	691	790	893	934
268	288		482				978
269	293		487				

Pittsburgh, PA Trial
Trial locations for Pittsburgh are Squirrel Hill, Glenshaw, and Oakland.

Phone numbers qualifying for the trial are in the 412 area code and have one of the following prefixes (first 3 numbers of your phone number):

268	383	420	421
422	486	487	492
521	578	605	621
622	623	624	641
647	648	681	682
683	687	688	692
802	862	961	

Order Trial Service

If your home area code is 703 or 412 and your NXX (the first 3 digits of your phone number) is included in one of the tables shown above, we will check your line facilities and contact you within 48 hours. If your phone number does not meet our area code and NXX requirements, you will be added to our reservation list and notified when InfoSpeed service becomes available in your area. Please note that participation in these trials is limited.

Please note that the system requirements for InfoSpeed are:

Windows: IBM(TM) compatible PC with a 486 or higher processor, Microsoft(R) Windows 95(R), Windows NT(R) 4.0 or higher, VGA or SVGA video card, VGA monitor recommended, 16MB RAM, 25MB free hard disk space.

Macintosh: Apple(TM) compatible computer with a Power PC(TM) processor or 68040 or higher processor (Performa 575 or better, Quadra, Power Macintosh), 10Base-T Ethernet Connector, Mac(TM) OS system software version 7.5.3 or later, 16MB RAM, 10MB free hard disk space. *(Northern VA only).*

Please fill out the form below to inquire more about ADSL Services.

First Name

Last Name

E-Mail Address

Your Home Phone Number

A Daytime Phone Number

Street Address

Apt., Suite, Bldg.

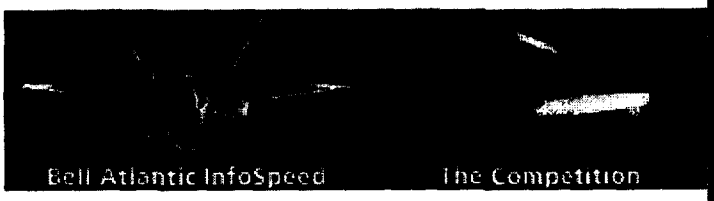
City

State Zip

Submit Form Reset Form

InfoSpeed vs. Other Services

InfoSpeed Service provides the fastest dedicated link to your home.



InfoSpeed Service vs. Analog Modems

Analog modems tie up your phone line. InfoSpeed Service provides you with the flexibility to surf the Internet while you talk on the phone or send a fax, over one phone line.

Analog modems require you to dial an ISP or Remote LAN, sometimes experiencing busy signals. InfoSpeed is always connected - as long as your computer is on. It requires no dialing, and hence no busy signals!

Special Offers

Current analog modem speeds are less than 56 Kbps. Even if you use the newest analog modem technology that enables you to tie two data streams together, you are still limited to 112 Kbps. InfoSpeed Service is much faster. In fact, InfoSpeed 640K is over 12 times faster than a 56 Kbps modem.

Analog modems are, of course, analog. InfoSpeed sends information digitally all the way to your home, providing a more stable, reliable connection.

InfoSpeed Service vs. Cable Modem Service

Cable modem services offer shared bandwidth between you and your neighbors. Your speed will vary with how many people are on the cable modem network. With InfoSpeed Service, you have a dedicated connection to your home.

Cable modem architecture is a shared arrangement. Data passes over a common link. With InfoSpeed, you have a dedicated access connection to your home. Your data travels from your home directly to your Internet Service Provider, so your information is more secure.

Plus, InfoSpeed Service is provided by Bell Atlantic - the company you know and trust - a company that has brought you reliable services for over 50 years.

Become a Service Provider

Leverage the growing market of InfoSpeed users.

Microsoft CEO Bill Gates' technology predictions for the new year are out: fast DSL (digital subscriber lines) connections... will make a big splash in 1998... DSL will take off...

-By Jeff Pelline, NEWS.COM, December 30, 1997

The Internet is growing - not only in users and people connecting, but also in data file sizes and downloadable information. Yesterday it was text. Today it is graphics. Tomorrow? The sky is the limit, not the bandwidth. Customers are demanding faster access and new applications. Bell Atlantic can help you leverage the bandwidth so you can provide your residential customer with megabits of information.

Where Do You Fit In?

Bell Atlantic is providing the transport, the basic high-speed access connection to the residence. That is what we do best. Here is where you fit in: Content, Internet Access and Services. That is what you do best. Customers need a place to go on the Internet to get their e-mail, set-up home pages, chat with a friend, check information, or just surf around. And, with the bandwidth of InfoSpeed Service, powered by ADSL technology, the potential for new applications, by you, our partners, is tremendous!

Special Offers

Bell Atlantic is in the process of looking for partners for Internet Protocol (IP) connectivity. Bell Atlantic has the access and transport. We need you to provide the services and content. You have grown the Internet. Your network and content are key parts of the puzzle. We need your piece to make the picture complete. Help us make the customer's Internet experience a rewarding, educational, and entertaining one.

By partnering with Bell Atlantic Consumer Data Services in the offering of InfoSpeed Service, you, as a Service Provider, content developer, or media company can offer more services and add greater value to your customers.

For More Information

For more information, email:

Jake Rosen
XDSL Business Product Line Management
Bell Atlantic Corporation
jacob.rosen@bellatlantic.com

Glossary of Terms

A B C D E F G H I J K L M N
O P Q R S T U V W X Y Z

A Top

ADSL Data Network (ADN)
An end-to-end communications network where the access loop technology is based on ADSL, and the end-to-end connectivity is provided by TCP/IP.

Asymmetric Digital Subscriber Line (ADSL)
Modems attached to a twisted pair copper wiring that transmit from 1.5 Mbps downstream (to the subscriber) and from 64 Kbps upstream, depending on line distance.

Asynchronous Transfer Mode (ATM)
A set of telecommunication interfaces defined by ANSI and ITU. A form of digitized data transmission based on fixed-length cells that can carry data, voice, and video at high speeds.

ADSL Terminal Unit-Central (ATU-C)
Located at the Central Office end.

ADSL Terminal Unit-Remote (ATU-R)
Located at the customer premises end.

B Top

Bandwidth
This is a reflection of the size or the capacity of a given transmission channel.

Broadband
Sharing the bandwidth of a medium such as copper or fiber-optic cable, to carry more than one signal.

C Top

Central Office (CO)
Where telephone companies terminate customer lines and locate switching equipment to interconnect those lines with other networks.

D Top

Downstream
The communications from the network towards the customer premises.

E Top

Ethernet
A LAN used to connect devices within a single building or campus at speeds up to 10 Mbps.

F Top

Fast Ethernet
A LAN used to connect devices within a single building or campus at speeds up to 100 Mbps. The underlying medium is fiber optics, and the topology is a dual- attached, counter-rotating token ring.

G Top

Gigabits per second (Gbps)